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AIR CLIMATE & ENERGY RESEARCH PROGRAM
BUILDING A SCIENTIFIC FOUNDATION FOR SOUND ENVIRONMENTAL DECISIONS

Air Sensor Evaluation and Collaboration

WHAT: EPA offers technology developers the opportunity to send in your sensor for evaluation in a controlled laboratory setting.

WHEN: Nominate your device by June 30, 2012
Testing to occur July – September, 2012

HOW: Device developers should submit a statement of interest to EPA by June 30, 2012 providing basic information about their device. Due to capacity constraints, EPA will accept a limited number (~10) devices for evaluation over a range of pollutant concentrations and environmental conditions (e.g. humidity and potential interferences). Participants will be invited to visit the EPA lab in early July to discuss their instruments, the evaluation protocol, and receive a tour of the facility. Following the completion of the evaluation each participant will receive information on the performance of their device under known environmental conditions.

QUESTIONS or Point of Contact: Ron Williams, 919-541-2957,
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SELECTION CRITERIA: Devices receiving the highest consideration:

- have the technical feasibility to measure NO₂ and/or O₃ at environmentally relevant concentrations,
- have some preliminary data on expected performance characteristics,
- have not previously undergone standardized evaluations under known challenge test conditions by any party, and
- represent highly portable sensor and smart phone type applications featuring continuous measurement capabilities.

DETAILS: The evaluation is intended to provide technical feedback to developers of newer, low cost personal/portable sensors. The US EPA cannot provide endorsement of any tested devices. Device developers submitting a statement of interest to participate (by email) should be aware of the following requirements:

1. The device must be fully operational, and be developed to a point complete with its own power supply and telecommunication tools (if applicable) by the June 30th deadline.
2. The developer must be able to provide clear, written, step-wise directions for operating the device (set-up/operation/data recovery, etc) at its point of release to the US EPA.
3. The US EPA will need to have access to your device for at least two months during evaluation period.
4. It is preferable that the device operate via internal (battery) power using either replacement cells or rechargeable cells. Please provide the necessary recharging tools. Optimally, your unit should be capable of operating a minimum of eight hours on internal power. If the device requires AC power for operation, you will need to provide the necessary electrical transformer/connections.
5. Your device should be housed within a break-resistant case or have its own external skin to permit normal handling practices.
6. Your device design should be capable of accepting a wide range of expected temperature and relative humidity conditions during testing and pose no intrinsic safety issues.